Patent Claims:

- 1. Method for individualizing a hearing aid in adaptation to the loudness perception of the individual, said method consisting of the following:
 - Measurement and quantification by parameters of the loudness perception of the individual, weighted by a first factor;
 - Weighting of a normal loudness perception and its parameters by a second factor and use of the weighted loudness perception and its parameters for adjusting the hearing aid.
- 2. Method as in claim 1, whereby the compression and/or amplification is/are adjusted in the hearing aid, for which purpose the compression and, respectively, the amplification are each determined as a function of the frequency.
- 3. Method as in claim 2, whereby, for determining the compression, the loudness perception of the individual is quantified by means of a HVLS/LOHL factor which is determined by loudness scaling at a minimum of one frequency.
- 4. Method as in claim 3, characterized in that the HVLS/LOHL factor is modeled using the equation

 $bg_{10}(\alpha) = a_a \times HV/HL + b_a \times log (HVHL) + VP_{consta}$

where

 $-\alpha$ = gradient of the loudness function,

- HV/HL = hearing loss in dB,

 $-a_a$, b_a = constant function parameter, and

- VP_{consta} = the individual function parameter which adapts the HVLS/ LOHL factor to the data sampling points α_1 , α_2 , α_3 , ...,

and that VP_{consta} is determined on the basis of a loudness scaling performed at a minimum of one frequency and preferably at three different frequencies.

- 5. Method as in claim 2, whereby, for determining the amplification, the loudness perception of the individual is quantified by means of an HVL0/HLL0 factor which is defined by loudness scaling at a minimum of one frequency.
- 6. Method as in claim 5, characterized in that the HVL0/HLL0 factor is modeled using the equation

$$L_0 = a_L / x HV/HL + b_L x log(HV/HL) + VP_{constL}$$

where

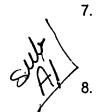
 $-L_0$ = level of loudness=0,

- HV/HL = hearing loss in dB,

 $-a_L$, $b_L = constant$ function parameter, and

- VP_{constL} = individual function parameter which adapts the HVL0/HLL0 function to the data sampling points L₀₁, L₀₂, L₀₃, ...,

and that VP onst. is determined on the basis of a loudness scaling performed at a minimum of one frequency and preferably at three different frequencies.



- Method as in one or several of the claims 3 to 6, whereby the hearing loss is used for determining the frequencies at which loudness scaling is performed.
- Method as in one or several of the preceding claims, characterized in that the value of the weighted factors depends on the assumed and/or determined accuracy of the loudness scaling data.
- 9. Method as in claim/8, characterized by the selection of a value of 2/3 for the first factor and of a value of 1/3 for the second factor.